

# **NCDOT Prioritization 3.0 Project Summary**

**SPOT ID:** H140842 Mode: Highway Status: Submitted

# US-74, NC-87 (Maco Road)

From/Cross Street: Intersection of US 74/76 & NC 87

(Maco Road)

To:

Length: 2

Specific Improvement Type: 7 - Upgrade At-grade Intersection to Interchange or Grade Separation

Cost to NCDOT: \$9,610,000

Project Category: Statewide Mobility

TIP#:

Fully Funded in Draft STIP?

**Description:** 

Upgrade at grade intersection to interchange

Division(s): Division 3

MPOS(s)/RPO(s): Cape Fear RPO

County(s): BRUNSWICK

### **Project Location**



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# **Statewide Mobility Total Score: 19.53**

| Quantitative Score  |   | Division Engineer<br>Local Input Points | MPO/RPO Local<br>Input Points |
|---|---|---|-------------------------------|
| Congestion (V/C) (30%) Safety (10%) Economic Competitiveness (10%) Multimodal + [Freight & Military] (20%) [Travel Time] Benefit/Cost (30%)  Totals: Weight: 100% Weighted Score: | 26.09<br>66.70<br>0.83<br>23.20<br>1.04 | N/A                                     | N/A                           |

### **Regional Impact Total Score: 32.88**

| Quantitative Score  |                        | Division Engineer<br>Local Input Points | MPO/RPO Local<br>Input Points |
|---|------------------------|---|-------------------------------|
| Safety (25%)<br>Multimodal + [Freight & Military] (25%)<br>[Travel Time] Benefit/Cost (20%) | 66.70<br>23.20<br>1.04 | Percent: 15%<br>Points: 0               | Percent: 15%<br>Points: 68    |
| Totals: Weight: 70% Weighted Score:   | 22.68                  |   |                               |

#### **Division Needs Total Score: 20.88**

| Quantitative Score   |                         | Division Engineer<br>Local Input Points | MPO/RPO Local<br>Input Points |
|--|-------------------------|---|-------------------------------|
| Congestion (V/C) (20%) Safety (20%) Multimodal + [Freight & Military] (10%)  Totals: Weight: 50% Weighted Score: 2 | 26.09<br>66.70<br>23.20 | Percent: 25%<br>Points: 0               | Percent: 25%<br>Points: 0     |

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### Project Data \*

#### **Existing Conditions**

#### **Existing Cross-Section:** Speed Limit: 55 Length (miles); Multi-Lane Highway Facility Type: Access Control: Limited Functional Classification: Other Principal Arterial Terrain Type: Level Lane Width: 12 Paved Shoulder Width: 2 Roadway has Curb & Gutter? No Volume (AADT): 27545.19 Capacity: 109658.78 Volume/Capacity Ratio: 0.25 % Autos: 88% % Trucks: 12% Truck Volume: 3383.39 0 Crash Density: 0 Crash Severity: 0 Critical Crash Rate: Crash Frequency: 66.7 Severity Index: 66.7 County Tier Designation: Yes Non-Interstate STRAHNET Route? Average Commuting Time: 23 Divided Existing Median Type (for Cost Estimation): Pavement Condition Rating: 98 53.71 **Actual Congested Speed:** Travel Time Index: 1.02

#### **Project Benefits**

| Project Cross-Section:                                 |                          |
|--|--------------------------|
| Speed Limit:   | 55                       |
| Length (miles):  | 2                        |
| Facility Type:   | Freeway                  |
| Access Control:  | Full                     |
| Functional Classification:                             | Other Principal Arterial |
| TerrainType:   | Level                    |
| DOT Design Lane Width:                                 | 12                       |
| DOT Design Paved<br>Shoulder Width:                    | 4                        |
| Travel Time Savings for 30 Years (Total):              | 431000                   |
| Travel Time Savings for 30 Years (Autos):              | 378060.01                |
| Travel Time Savings for 30 Years (Trucks):             | 52939.99                 |
| Long-Term Employment:                                  | 6.99                     |
| % Change in Economy:                                   | 9.57E-06                 |
| Provides Direct Connection to Transportation Terminal? | No                       |
| Does project upgrade how the roadway functions?        | Yes                      |
| In CTP or LRTP?  | No                       |
| CTP/LRTP Name:   |                          |
| CTP/LRTP Completion Year:                              |                          |
| Submitted by:  | Division 3               |

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<sup>\*</sup> Data reflects calculations which include weighted averages (where applicable) and represent raw output from the Department's SPOT On!ine tool and associated databases.

# **Project Ownership**

### **Division**

| Division              | Percent | Regional Impact | Division Needs |
|-----------------------|---------|-----------------|----------------|
| Division 3            | 100%    | 0               | 0              |
|                       | 0%      | 0               | 0              |
|                       | 0%      | 0               | 0              |
| TOTAL Division Points |         | 0               | 0              |

#### MPO/RPO

| MPO/RPO              | Percent | Regional Impact | Division Needs |
|----------------------|---------|-----------------|----------------|
| Cape Fear RPO        | 100%    | 68              | 0              |
|                      | 0%      | 0               | 0              |
|                      | 0%      | 0               | 0              |
| TOTAL MPO/RPO Points |         | 68              | 0              |

# **Project Cost and Source**

| Construction Cost:  | \$7,750,000 | Cost Estimation Tool |
|---------------------|-------------|----------------------|
| Right-of-Way Cost:  | \$1,860,000 | Cost Estimation Tool |
| Utilities Cost:     | \$0         | Cost Estimation Tool |
| Total Project Cost: | \$9,610,000 |                      |
| Other Funding:      | \$0         | None                 |
| Cost to NCDOT :     | \$9,610,000 |                      |

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